



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/046,677	03/24/1998	KIMIKAZU FURUKAWA	614.1889	2428

21171 7590 02/17/2004

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

AGDEPPA, HECTOR A

ART UNIT	PAPER NUMBER
----------	--------------

2642

DATE MAILED: 02/17/2004

25

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/046,677

Applicant(s)

FURUKAWA ET AL.

Examiner

Hector A. Agdeppa

Art Unit

2642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-13,15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1, 10, and 16 – 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

All of the above claims cite the limitation “selectively blocks/blocking... completely,...” As claimed and interpreted generally, such a limitation seems to be contradictory in that a signal is being blocked first selectively and then completely. If interpreted as meaning either the command signal from the telephone unit or the command signal from the telephone network is selected for blocking, the manner in which the claim is written is nonetheless confusing since it is unclear, as claimed, that the “selectively” term refers to blocking only the command signal from the telephone unit to the network. Note that the use of the term “selectively” in claim 1 regarding the disconnection of the telephone network from the unit or device is clear and it is suggested that applicant, if an amendment is to be made, to follow that example.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1 – 6, 8 – 13, and 15 - 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,898,756 (Manning et al.) in view of US 5,864,607 (Rosen et al.), US 4,099,033 (Murray), and further in view of Bulfer.

Regarding claims 1, 3 – 6, 8 - 10, 12, 13, and 15 – 20, Manning et al. teaches a system and associated method of a parallel connected dialing signal transmission inhibiting device for data transfer over a telephone link, wherein a device may be connected to a telephone for the purpose of inhibiting DTMF signals going through or suppressing those signals to a central office when those DTMF signals are indicative of controls or simply any signal that should not be passed on to the central office for processing. Manning et al. teaches that this could include the ability to control various household devices via a standard telephone unit or for programming of the actual phone as for example, speed dial, or even for the purpose of invoking special telephony features on that phone as for example, the above-mentioned speed dial. Manning et al. accomplishes this by teaching a device having therein a tone/signal generator 300 for generating tones to be sent to a central office if so needed, a DTMF/tone detector 210 for detecting when DTMF signals come either from the telephone network and represent an actual call or in the event when Manning et al.'s invention is used for voice messaging, controlling signals or whether they are control signals coming from the telephone unit, a microprocessor 400 and various electrical components for switching between having the telephone unit connected to a telephone network or not. (Abstract,

Art Unit: 2642

Figs. 1 – 5B, Col. 1, line 53 – Col. 3, line 35, Col. 4, lines 14 – 50, Col. 7, line 10 – Col. 12, line 12)

What is not taught by Manning et al. is actual disconnection of lines and blocking completely, command signals. Rather, Manning et al. teach attenuation of DTMF signals on lines via a switchable a.c. load. However, the purpose and effect of disconnecting a telephone unit from the network or attenuating a signal to the point that it cannot be recognized or picked up by the network is the same.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have selected a method of disconnecting the telephone unit from the network because either method effects the same result. Manning et al. teaches an invention whereby control/programming/.etc. signaling is inhibited so that a central office or in the case of voice mail usage, credit card calling, etc. (Col. 2, line 51 – Col. 3, line 46, Col. 7, line 43 – Col. 8, line 55). In any of these scenarios or even in normal telephone usage, or call waiting, or three-way calling, control signals or DTMF tones generated by mistakenly pressing a button, not meant to be dialing signals are passed along to a desired program or terminal or control device or are ignored, without being recognized or sent to a switch and on to a called party.

Moreover, see the Abstract of Manning et al. wherein it is taught that "...transmission-inhibiting device is disclosed which detects DTMF signals across tip and ring conductors of a telephone link and switches in an a.c. load that attenuates the dialing signals by at least 30dB. This prevents action in response to the DTMF signals by a central office servicing the telephone link, thereby allowing commands-data to be

Art Unit: 2642

transmitted within the home telephone wiring." This is exactly the purpose of the claimed invention that Manning et al. reads on.

Also, note that command signals in Manning et al. are sensed by the dialing of for example, 2 ## signals followed by and digit. Therefore, if the 2 ## signals are not first detected by the system of Manning et al., then those DTMF signals are not blocked, which of course means that Manning et al. teaches selective inhibition only of DTMF signals.

Also, completely blocking signals from being transmitted on telephony lines is extremely old and well known as taught by Murray, which employs a switch 10, for short-circuiting the telephony lines when a call or signals are to be restricted and allowing signals to pass through to the lines when for example, a call is authorized or an emergency and a special code is dialed. (Abstract, Figs. 1 and 2, Col. 2, line 1 – Col. 3, line 41 of Murray)

It again would be obvious to one of ordinary skill in the art to have employed an actual signal blocking method and device such as taught by Murray inasmuch as this is a well known and old method of inhibiting certain DTMF signals. Whether inhibiting as taught by Manning et al. or actually blocking as taught by Murray, the end-result of blocking certain DTMF signals is accomplished.

Furthermore, the invention of Manning et al. is operable as a standard telephone system allowing incoming and outgoing calls. Even answering machines, which allow a caller to call their home telephone number to which an answering machine is connected to and listen to messages stored thereon, allow for commands to be transmitted to the

Art Unit: 2642

telephone unit to control the machine. Therefore, because an incoming call is recognized as coming from the telephone network, Manning et al. as well, can recognize between network non-command DTMF signals and command-DTMF signals which do come from the network. Any standard telephone system is able to distinguish between such signals when certain dialing codes are used such as when a # signal is dialed to start the dialing string, whether from a unit or to a unit (e.g., from the network).

What is also not taught by Manning et al. is a data processing device being controlled or utilized via a telephone unit for telephony purposes.

However, Rosen et al. teaches communication with a computer using telephones, wherein a device allows DTMF tones from a telephone unit to be used to control telephony communication service or communication software resident on the computer, while allowing communication to and from a telephone network when need be. (Abstract, Figs. 1 – 5, Col. 1, line 26 – Col. 3, line 15, Col. 4, line 4 – Col. 12, line 48, Col. 16, line 1 – Col. 17, line 28)

Manning et al. and Rosen et al. both teach the use of a telephone for controlling a separate appliance, Manning et al. being limited to household appliances or the telephone unit itself. It would have been obvious to have extended the invention of Manning et al. to include controlling telephony services on a computer inasmuch as computers can be considered to be simply another separate household appliance, and as taught by Rosen et al., it is useful to be able to control computers via telephone units for ease of operation, for convenience, remote operation, etc. Albeit that the invention

Art Unit: 2642

of Rosen et al. functions in a slightly different manner than the invention of Manning et al. with respect to how signals are inhibited and how communication is achieved between computer and telephone, i.e., Rosen et al. teaches the use of voice recognition/commands via the telephone unit whereas Manning et al. teaches the use of DTMF tones for control.

However, it is very well known in the art to convert voice into DTMF tones for specifically the purpose of using voice commands as taught by Bulfer. (Abstract, Fig. 1 and 2, Col. 1, line 13 – Col. 2, line 46, Col. 3, line 10 – Col. 5, line 24) Furthermore, it is very well known in the art that many systems already convert voice into DTMF signals as this was once the only way for voice recognition commands to be implemented and recognized by telephonic systems.

Also not taught explicitly by Manning et al. is codes differing between network sources and telephony units.

However, such would be at the very least obvious if not inherent in most any telecommunications system. Calls from the network will come in to check, for example, voice mail or check messages on an answering machine. In this common scenario, the system MUST be able to differentiate between signals from the network and those from the telephone unit, and such is usually done by having different predetermined values for various DTMF signals, or else the system becomes confused or has interfering feature interactions. Furthermore, Manning et al. contemplates differentiating between various DTMF signals and predefined code designations, as seen in the sections of Manning et al. mentioned above.

Regarding claims 2 and 11, it is inherent or would be very obvious to have a unit or two separate units, as the multiplication of units performing the same function has no inventive function, for the purpose of separating DTMF from voice signals as claimed in the present invention. One simple example is when one would not want to send voice to the microprocessor 400 of Manning et al. when programming it if it is not required. Obviously, only the DTMF control signals are necessary. Furthermore, if one were to send voice and DMTF tones simultaneously, a system would either never be able to detect what signals are for control or which actually comprise, for example, a conversation or if it could, it would be counter-intuitive to not separate them as DTMF and voice signals many times have different functions.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 10, and 16 – 20 have been considered but are moot in view of the new ground(s) of rejection. Examiner has maintained his rejection and the grounds therefore as well as applied the Murray reference to clarify the obviousness rejection. Applicant's arguments have been addressed above in the rejection.

Conclusion

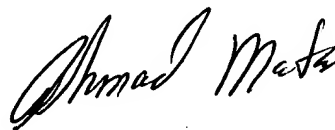
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hector A. Agdeppa whose telephone number is 703-305-1844. The examiner can normally be reached on Mon thru Fri 9:30am - 6:00pm.

Art Unit: 2642

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad F. Matar can be reached on 703-305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

H.A.A.
January 27, 2004

A handwritten signature in black ink, appearing to read "Ahmad Matar", is positioned above the printed name and title.

AHMAD MATAR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600